IN THE CLAIMS

1.   (Original)   A method comprising:

determining contour requirements from a plurality of factors; and

based on the contour requirements, one of:

generating at least one standard content-derived signature contour from at least one of a content identifier and a second content-derived signature contour, and

generating at least one optimized content-derived signature contour from contour-related data and at least one content-derived signature contour.

2.   (Original)   The method of claim 1, wherein the at least one content-derived signature contour is expanded.

3.   (Original)   The method of claim 2, wherein the expanded at least one content-derived signature contour is derived from a recursively determined content identifier tree.

4.   (Original)   The method of claim 1, wherein the at least one optimized content-derived signature contour is derived from at least one of:

a differential contour derived from a content-derived signature contour and at least a portion of differential data,

a content-derived signature contour and at least a portion of a contour patch,

a content-derived signature contour and at least a portion of a contour override,

a content-derived signature contour and at least a portion of a transform contour,

a content-derived signature contour and at least a portion content access metadata,

a content-derived signature contour and at least a portion of content access metadata, and

a content-derived signature contour modified to optimize one of size and contents to one of decrease bandwidth and increase redundancy.

5.   (Original)   The method of claim 1, the at least one optimized content-derived signature contour is a restoration contour, wherein the restoration contour includes at least one of metadata, a content identifier, a local media descriptor, and a contour patch.

6.   (Original)   The method of claim 1, the at least one optimized content-derived signature contour is a factored contour, wherein the factored contour includes at least a single metadata object that represents metadata for a plurality of articles.

7.   (Original)   The method of claim 1, wherein the contour requirements include:

at least one of computational complexity, storage capacity, cost, communication bandwidth, communication latency, and contents of reference contours.

8.   (Original)   A method comprising:

requesting one of at least one content-derived signature contour and at least one optimized content-derived signature contour, the content-derived signature contour including one of a plurality of content identifiers and at least one content-derived signature contour, and the optimized content-derived signature contour is derived from contour-related data and one of the at least one content-derived signature contour and a derivation from the at least one content-derived signature contour;

determining if one of the at least one content-derived signature contour and the at least one optimized content-derived signature contour is present on at least one device;

dynamically creating one of the at least one content-derived signature contour and the at least one optimized content-derived signature contour if it is determined that one of the at least one content-derived signature contour and the at least one optimized content-derived signature contour is not present on the at least one device,

returning one of the at least one content-derived signature contour and the at least one optimized content-derived signature contour if one of the at least one content-derived signature

contour and the at least one optimized content-derived signature contour is determined to be present on the at least one device; and

transmitting client contour identifications (CCIDs).

9.   (Original)   The method of claim 8, wherein a plurality of representations of one of the at least one content-derived signature contour and the at least one optimized content-derived signature contour are returned.

10.   (Original)   The method of claim 8, wherein the at least one content-derived signature contour and the at least one optimized content-derived signature contour is originally stored on one of the at least one device and a source device, wherein the source device is one of local and remote to the at least one device.

11.   (Original)   An apparatus comprising a machine-readable medium containing instructions which, when executed by a machine, cause the machine to perform operations comprising:

determining contour requirements from a plurality of factors,

based on the plurality of factors, one of:

generating at least one content-derived signature contour from one of a plurality of content identifiers and at least one content-derived signature contour, and

generating at least one optimized content-derived signature contour from contour-related data and one of said at least one content-derived signature contour and a derivation from said at least one content-derived signature contour.

12.   (Original)   The apparatus of claim 11, wherein the at least one content-derived signature contour is expanded.

13.   (Original)   The apparatus of claim 11, wherein the expanded at least one content-derived signature contour is derived from a recursively determined content identifier tree.

14. (Original) The apparatus of claim 11, wherein the at least one optimized content-derived signature contour includes at least one of:

a differential contour derived from a content-derived signature contour and at least a portion of differential contour data,

a content-derived signature contour and at least a portion of a contour patch,

a content-derived signature contour and at least a portion of a contour override,

a content-derived signature contour and at least a portion of a transform contour,

a content-derived signature contour and at least a portion content access metadata.

15. (Original) The apparatus of claim 11, the at least one optimized content-derived signature contour is a restoration contour, wherein the restoration contour includes at least one of metadata, content identifiers, a local media descriptor, and at least one contour patch.

16. (Original) The apparatus of claim 11, the at least one optimized content-derived signature contour is a factored contour, wherein the factored contour includes at least a single metadata object that represents metadata for a plurality of articles.

17. (Original) The apparatus of claim 11, wherein at least one content-derived signature contour and the at least one optimized content-derived signature contour reside on one of at least two separate devices and one device.

18. (Original) The apparatus of claim 11, wherein at least one content-derived signature contour and the at least one optimized content-derived signature contour are stored on one of the at least one device and a source device, wherein the source device is one of local and remote to the at least one device.

19. (Original) The apparatus of claim 11, wherein the at least one content-derived signature contour and the at least one optimized content-derived signature contour are originally stored on one of the at least one device and a source device, wherein the source device is one of local and remote to the at least one device.

20. (Original) An apparatus comprising a machine-readable medium containing instructions which, when executed by a machine, cause the machine to perform operations comprising:

requesting one of at least one content-derived signature contour and at least one optimized content-derived signature contour, the content-derived signature contour including one of a plurality of content identifiers and at least one content-derived signature contour, and the optimized content-derived signature contour is derived from contour-related data and one of the at least one content-derived signature contour and a derivation from the at least one content-derived signature contour;

determining if one of the at least one content-derived signature contour and the at least one optimized content-derived signature contour is present on at least one device,

dynamically creating one of the at least one content-derived signature contour and the at least one optimized content-derived signature contour if it is determined that one of the at least one content-derived signature contour and the at least one optimized content-derived signature contour is not present on the at least one device, and

returning one of the at least one content-derived signature contour and the at least one optimized content-derived signature contour if one of the at least one content-derived signature contour and the at least one optimized content-derived signature contour is determined to be present on the at least one device.

21. (Original) The apparatus of claim 20, wherein a plurality of representations of one of the at least one content-derived signature contour and the at least one optimized content-derived signature contour are returned.

22. (Original) The apparatus of claim 20, wherein the at least one content-derived signature contour and the at least one optimized content-derived signature contour is originally stored on one of the at least one device and a source device, wherein the source device is one of local and remote to the at least one device.

23.   (Original)   A system comprising:

a plurality of devices coupled to a transmission medium, each of the plurality of devices coupled with a first process and a second process and having one of at least one content-derived signature contour and the at least one optimized content-derived signature contour ,

wherein the first process:

determines contour requirements from a plurality of factors,

based on the plurality of factors, one of:

generates at least one content-derived signature contour from one of a plurality of content identifiers and at least one content-derived signature contour, and

generates at least one optimized content-derived signature contour from contour-related data and one of said at least one content-derived signature contour and a derivation from said at least one content-derived signature contour; and

stores one of the at least one content-derived signature contour and the at least one optimized content-derived signature contour., and

wherein the second process:

requests one of the at least one content-derived signature contour and the at least one optimized content-derived signature contour, the content-derived signature contour including one of a plurality of content identifiers and at least one content-derived signature contour, and the optimized content-derived signature contour is derived from contour-related data and one of the at least one content-derived signature contour and a derivation from the at least one content-derived signature contour;

determines if one of the at least one content-derived signature contour and the at least one optimized content-derived signature contour is present on at least one device,

dynamically creating one of the at least one content-derived signature contour and the at least one optimized content-derived signature contour if it is determined that one of the at least one content-derived signature

contour and the at least one optimized content-derived signature contour is not present on the at least one device

returns one of the at least one content-derived signature contour and the at least one optimized content-derived signature contour.

24. (Original) The system of claim 23, wherein the at least one content-derived signature contour is expanded.

25. (Original) The system of claim 23, wherein the expanded at least one content-derived signature contour is derived from a recursively determined content identifier tree.

26. (Original) The system of claim 23, wherein the at least one optimized content-derived signature contour includes at least one of:

a differential contour derived from a content-derived signature contour and at least a portion of differential contour data,

a content-derived signature contour and at least a portion of a contour patch,

a content-derived signature contour and at least a portion of a contour override,

a content-derived signature contour and at least a portion of a transform contour,

a content-derived signature contour and at least a portion content access metadata.

27. (Original) The system of claim 23, the at least one optimized content-derived signature contour is a restoration contour, wherein the restoration contour includes at least one of metadata, content identifiers, a local media descriptor, and at least one contour patch.

28. (Original) The system of claim 23, the at least one optimized content-derived signature contour is a factored contour, wherein the factored contour includes at least a single metadata object that represents metadata for a plurality of articles.

29. (Original) The system of claim 23, wherein a plurality of representations of one of the at least one content-derived signature contour and the at least one optimized content-derived signature contour are returned.

30.   (Original)   The system of claim 23, wherein the at least one content-derived signature contour and the at least one optimized content-derived signature contour is originally stored on one of the at least one device and a source device, wherein the source device is one of local and remote to the at least one device.

31.   (Original)   The system of claim 23, wherein the factors include:
       at least one of storage capacity, cost, and throughput.